

Appl. No. 10/693,296
Amdt. dated April 25, 2005
Response to Office Action Mailed January 26, 2005

PATENT

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 3. This sheet, which includes Fig. 3, replaces the original sheet including Fig.3.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

REMARKS/ARGUMENTS

Claims 1 and 31 are amended by this response. No claims are canceled. Accordingly, following entry of this amendment, claims 1-43 will remain pending.

The Examiner had objected to the drawings based upon their purported failure to show every feature of the invention specified in the claims. Accordingly, FIG. 3 has now been amended to include the elements cited by the Examiner. A revised drawing sheet showing the amendments is being submitted herewith.

The specification is also being amended at ¶[0063], ¶[0064], and ¶[0067] to conform to the amended FIG. 3. Support for this amendment to the specification may be found in the application as originally filed, at least in Figure 3 and the above-referenced paragraphs. No new matter has been added by virtue of these amendments to the drawings and specification.

The Examiner had rejected independent claims 1 and 31 as indefinite under 35 U.S.C. 112 ¶2, based upon purported inconsistency between the terms "fixed" and "rotatable". Claims 1 and 31 have now been amended to delete the term "fixed". Based upon this claim amendment, it is respectfully asserted that the indefinite claim rejections have been overcome.

The Examiner also rejected the pending claims as obvious in light of U.S. patent no. 6,116,848 to Thomas et al. ("the Thomas patent"), in combination with a plurality of other references. These claim rejections are overcome as follows.

Embodiments in accordance with the present invention relate to a wafer handling apparatus. One particular embodiment is shown and described in connection with Figures 5 and 3, reproduced respectively below.

wafer [2] preferably rests on stops 8A and 8B by its lower peripheral edge 17, as shown in FIG. 5.

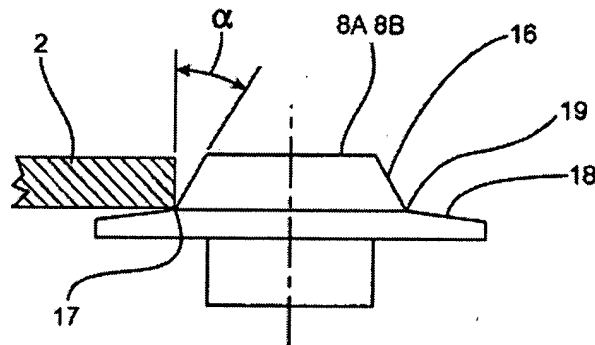


FIG. 5

Angular movement of the wafer [2] is then initiated by drive roller 9 until notch 3 passes through beam 21 enabling photosensitive cell to be activated, thus enabling us to identify the angular position of the wafer [2], whose rotation is then realized with respect to this position so as to place the wafer [2] in the position so determined. (Emphasis added; ¶[0068])

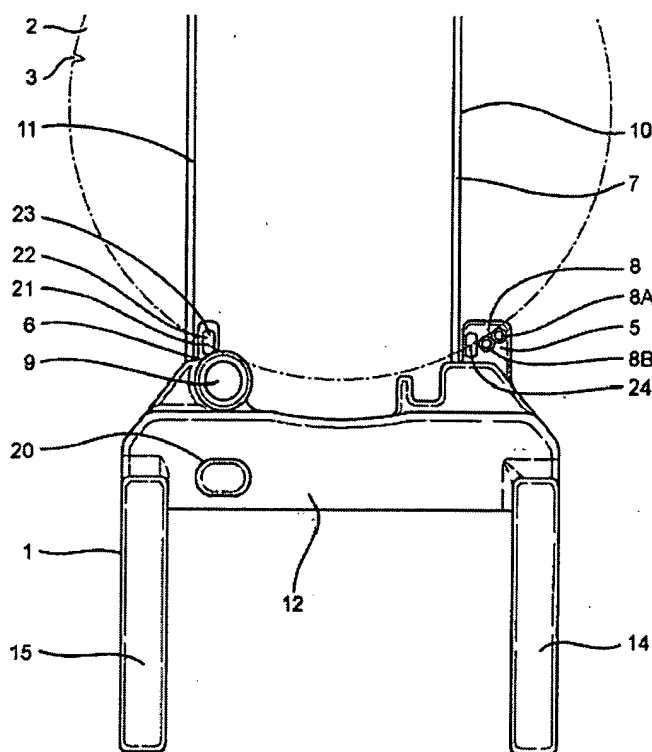


FIG. 3

Accordingly, pending independent claims 1 and 31 recite as follows:

1. An apparatus for accessing and gripping disc-shaped wafers supported in a housing and having peripheral position indicators, comprising:

... a rotatable driver mounted on said rigid structure at a position to engage said periphery of said wafer when supported by said rotatable wafer supports, and selectively operable to rotate said wafer while supported by said rotatable wafer supports to a selected radial position. (Emphasis added)

31. An apparatus for accessing and gripping a plurality of adjacent disc-shaped wafers supported in a housing and having peripheral position indicators simultaneously, comprising:

... a rotatable driver mounted on each said rigid support structure at a position to engage a said periphery of a said wafer when supported by said rotatable wafer supports, and selectively operable to rotate said wafer while supported by said rotatable wafer supports to a selected radial position. (Emphasis added)

As an initial matter, the Examiner is reminded that in order to establish a prima facie case of obviousness, the prior art reference (or references when combined) must teach or suggest all

the claim limitations. (Emphasis added; MPEP 2143). Here, none of the references relied upon by the Examiner, taken alone or in combination, teach a rotatable driver configured to engage a wafer periphery and rotate the wafer.

The Thomas patent is the primary reference relied upon by the Examiner to reject the claims. However, the Thomas patent contains absolutely no teaching, or even suggestion, regarding such a rotatable driver element.

Specifically, in the latest office action the Examiner identified element "50" of the Thomas patent as the "rotatable driver". However, even a cursory review of the Thomas patent reveals element 50 to be a "solenoid", whose function is not to rotate a wafer, but rather to contact and clamp the wafer in place:

When operating, active apparatus 30 uses multiple active contacts 48, 32 to provide effective centering of subject wafer, preferably independently of wafer diametral tolerance. Wafer gripping and centering actions are provided by at least one moving or the actuated contact 48 on the far side of the apparatus portions 34, as well as one moving contact 32 driven by plunger mechanically controlled by the solenoid 50, such contact 32 disposed in the opening 36 on near side of the apparatus 30. By mechanically closing on subject wafer in this gripping manner, centering is achieved such that variances in the wafer diameter are accounted. (Emphasis added; U.S. Patent No. 6,116,848, col. 3, lines 50-60)

There is absolutely no teaching, or even suggestion, in the Thomas patent, regarding a rotatable driver as recited in pending independent claims 1 and 31. Moreover, none of the other patents relied upon by the Examiner teach or suggest such a rotatable driver element.

Based upon the failure of the prior art relied upon by the Examiner to teach or suggest each of the elements of the pending claims, it is respectfully asserted that these claims are not obvious. The pending obviousness claim rejections are improper and should be withdrawn.

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Appl. No. 10/693,296
Amdt. dated April 25, 2005
Response to Office Action Mailed January 26, 2005

PATENT

Respectfully submitted,

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the end.

Kent J. Tobin
Reg. No. 39,496

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 415-576-0300
Attachments
KJT:kjt
60453155 v1

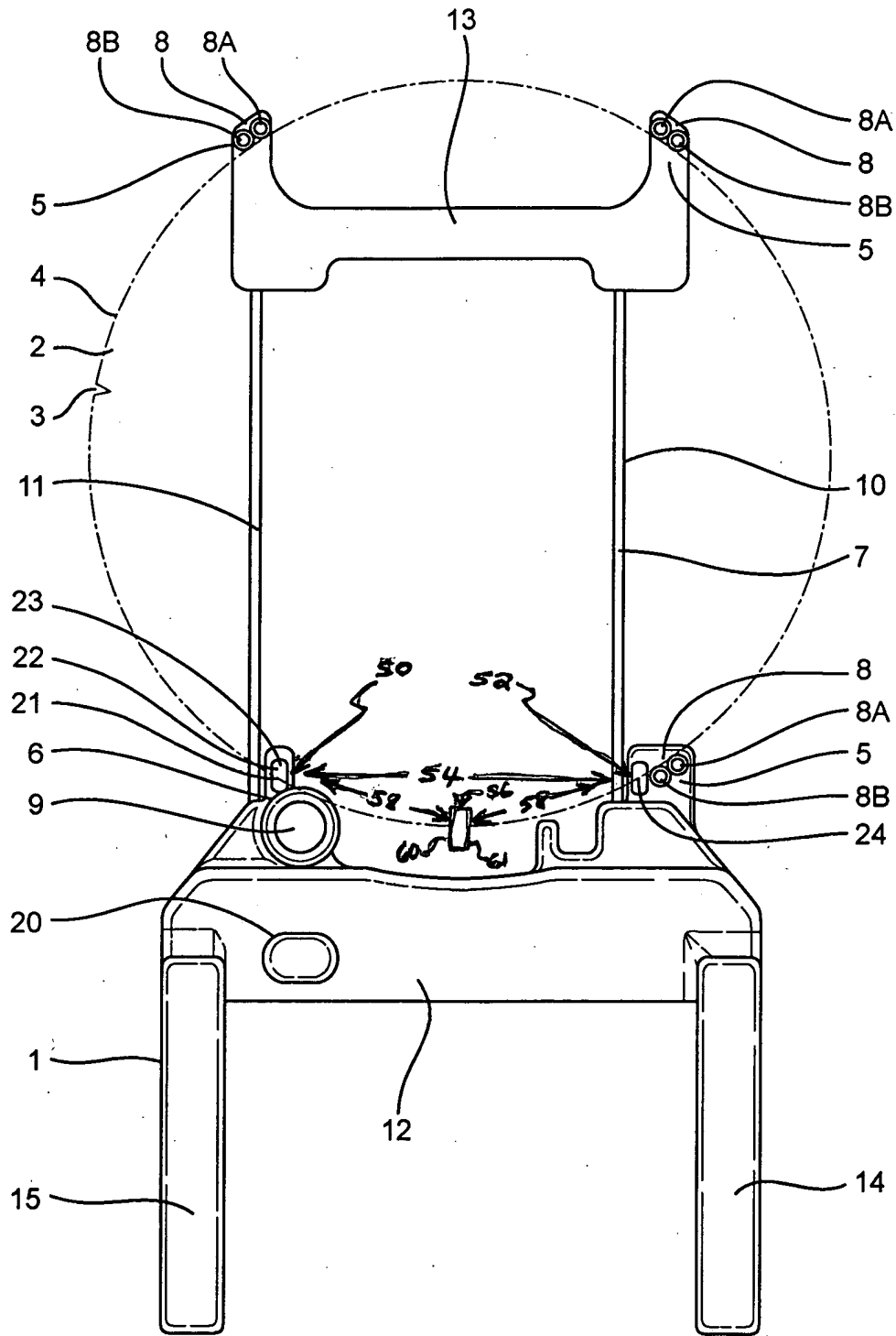


FIG. 3